

Evaluate each function at the given value.

1. $f(x) = -x^3 + 6x - 7, f(2)$	2. $f(x) = x^3 + x^2 - 5x - 6, f(2)$
3. $f(x) = x^3 + 3x^2 + 2x + 8, f(-3)$	4. $f(x) = x^3 + 5x^2 + 10 + 12, f(-2)$
5. $f(x) = x^4 + 3x^3 - 17x^2 + 2x - 7, f(3)$	6. $f(x) = x^5 - 47x^3 - 16x^2 + 8x + 52, f(7)$

State if the given binomial is a factor of the given polynomial. If not state the remainder.

7. $f(x) = x^3 - x^2 - x - 2, (k - 2)$	8. $f(x) = x^4 - 8x^3 - x^2 + 62x - 34, (b - 7)$
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9.
 $f(x) = x^4 + 9x^3 + 14x^2 + 50x + 9, (x + 8)$

10.
 $f(x) = x^4 + 6x^3 + 11x^2 + 29x - 13, (x + 5)$

11.
 $f(x) = x^4 - 8x^3 + 10x^2 + 2x + 4, (x - 2)$

12.
 $f(x) = x^5 - 25x^3 - 7x^2 - 37x - 18, (x + 5)$

13. $f(x) = x^5 + 6x^4 - 3x^2 - 22x - 29, (x + 6)$

14. $f(x) = x^4 + 10x^3 + 21x^2 + 6x - 8, (x + 2)$

15.
 $f(x) = -8x^4 + 36x^3 + 14x^2 + 25x + 25, (x - 5)$

16. $f(x) = x^4 + 2x^3 - 8x^2 - 11x + 13, (x + 3)$

17. $f(x) = x^3 + 2x^2 - 33x + 7, (x + 7)$

18. $f(x) = x^4 - 5x^3 - 20x^2 - 4x + 10, (x + 2)$